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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,579	03/11/2004	Eun-sung Lee	Q80074	4816

23373 7590 05/16/2005

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WASHINGTON, DC 20037

EXAMINER

LAZOR, MICHELLE A

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,579

Applicant(s)

LEE ET AL.

Examiner

Michelle A. Lazor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Claims 1 – 7, Species I, Claim 2 in the reply filed on 3/24/05 is acknowledged.

2. Claims 3 and 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 3/24/05.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Konishi et al. (U.S. Patent No. 6012858).

Konishi et al. disclose a spin coating apparatus comprising a spin chuck comprising a mount part (2) and an extended projection part (30); and a nozzle (40), wherein the extended projection part of the spin chuck may be placed at a height lower than that of the wafer (Figure 14C), and wherein the extended projection part of the spin chuck surrounds a circumference of

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the wafer (Figure 17; column 5, line 57 – column 6, line 23), as well as wherein the spin chuck further comprises a separation part, such as an arm (column 5, lines 23 – 38), which allows for separating the wafer from the spin chuck. Thus Konishi et al. disclose all the limitations of Claims 1, 2, 4, and 5, and anticipate the claimed invention.

5. Claims 1, 2, and 5 – 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto et al. (U.S. Patent No. 6012858).

Yamamoto et al. disclose a spin coating apparatus comprising a spin chuck comprising a mount part (2) and an extended projection part (37); and a nozzle (53), wherein the extended projection part of the spin chuck may be placed at a height lower than that of the wafer (Figure 11; column 6, lines 1 – 24), and wherein the spin chuck further comprises a separation part, such as an arm (column 6, lines 1 – 6), which allows for separating the wafer from the spin chuck, and which further comprises a gas exhaust part (Figures 10A and 10B; column 8, lines 24 – 67). Thus Yamamoto et al. disclose all the limitations of Claims 1, 2, and 5 – 7, and anticipate the claimed invention.

Conclusion

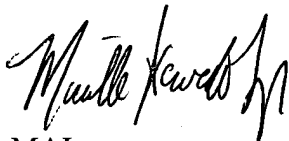
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gill, Jr. (U.S. Patent No. 4989345) discloses a spin chuck and nozzle (Figure 1); Hillman et al. (U.S. Patent No. 4856456) discloses a spin chuck (Figure 1); and Nakayama et al. (U.S. Patent No. 4790262) discloses a spin chuck and a nozzle (Figure 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A. Lazor whose telephone number is 571-272-1232. The examiner can normally be reached on Wed - Thurs 5:45 - 4:15.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MAL
5/5/05



CHRIS FIORILLA
SUPERVISORY PATENT EXAMINER

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